NASA
Glenn
Success
Stories

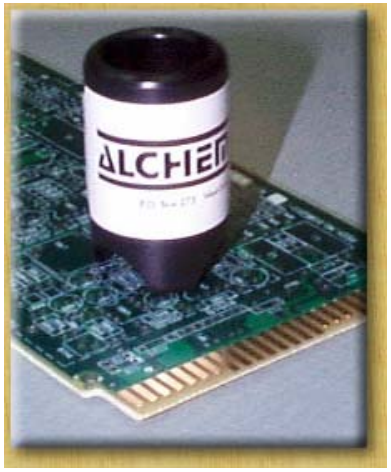
Acoustic Liquid Manipulation Improves Selective Plating Process

TECHNOLOGY

NASA's Acoustic Liquid Manipulation, which uses sound pressure to precisely control size and placement of droplets, is an excellent approach to selective plating.

COMMERCIAL APPLICATION

Alchemitron, an electronics circuit board plater, is looking for ways to selectively plate without a traditional mask. Using technology developed at GRC, they have been able to develop a new system which allows selective plating and greatly improves the uniformity of the plating process. This technology has the potential to provide significant cost and time savings for the industry. The system allows Alchemitron to reduce the amount of gold that is wasted during their plating process.



Alchemitron and NASA collaborated to produce a new system for plating circuit boards; a jointly-filed patent is pending.

SOCIAL/ECONOMIC BENEFIT

The new plating system represents an improvement in plating efficiency. The system will provide control and manipulative capability currently unavailable in any other manner. Once developed, the system will save time, processing costs, chemicals (and hence be "greener"), and put the gold back in the bank for Alchemitron.

NASA APPLICATIONS

Acoustic Liquid Manipulation has been developed by GRC researchers as a means of effectively controlling the size and position of droplets or liquids in space, including remote control agitation of liquids. Alchemitron and NASA collaborated to design and test a new system of plating based on NASA's technology, which led to NASA Glenn filing for a patent that is expected to issue in late 2002.

Point of Contact:

Great Lakes Industrial Technology Center
glitec@battelle.org
Phone: 216/898-6400
Fax: 216/898-6550
20445 Emerald Parkway Drive, S.W.
Cleveland, OH 44135

Commercial Technology Office
cto@grc.nasa.gov
Phone: 216/433-3484
Fax: 216/433-5531
21000 Brookpark Road
Cleveland, OH 44135